Sound Mix: The Framing of Multi-Sensory Connections in Urban Culture

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Space, Morality and Experience: Sensory Training and the Media from 1920 to 2000.
Michael Bull

Reflections on the growing influence and pervasiveness of the media in daily life have been subject to fierce theoretical and cultural debate from the 1920s onwards. The ambivalence of attitudes to modern forms of media consumption was demonstrated in Huxley's 1932 description of 'the feelies' a mixture of filmic and amusement park experience in his dystopian novel *Brave New World*:

"The other night, I experienced something I never have before. Lenina took me out to The Feelies (a kind of movie theatre that incorporates the senses into a movie). Well, we got to the place and sat down in the big chairs. Soon enough, the lights went down and out of nowhere red fiery letters appeared in front of us. In order for me to get the "feely effects" Lenina told me that I had to hold on to the great metal knobs that were located on the arms of my chair. The second I took hold of those knobs I felt a strange tingly sensation on my lips. Then, the very realistic images of two people stood in front of us. It was astonishing just how actual and real the image was. It was almost as if the actors were standing right next to us. Meanwhile, something called a scent organ released a smell that tied into the film. Before I knew it, the movie was over" (Huxley. *Brave New World*)

Huxley's description of the 'feelies' predicts a mediated immersive sensory experience that came to fruition later in the century with the development of virtual reality technologies. Unlike later protagonists such as Howard Rheingold, Huxley doesn't discount the importance of embodiment and the sense of smell in media experience. His protagonists still sit next to one another - their senses heightened - even if the storyline of the film is boring – the characters nevertheless feel 'as if' they are next to the fictional characters. In this chapter I take this ambivalent and dystopian view of the sensory nature of media and analyze it through an analysis of technological mediation and distance, the militarization of the senses and the resultant transformation of the moral compass of subjects who have increasingly experienced much of the world "as if the actors were standing right next to us".

Within the time frame of this chapter society has witnessed the mass and domestic consolidation of the gramophone and the telephone; have seen the mass incorporation of radio; the introduction of sound movies; the transition from black

and white newsreels to color film; the transition from cinema going to the swift rise and universal adoption of the television; the rise of computing and the Internet; the development of a wide range of mobile technologies from the transistor radio, the Walkman and the mobile phone. In addition to this the storage, transmission and retrieval of information has been revolutionized through the use of answer-phones, digital libraries and the Internet. The predominance of these largely audio-visual media have now been supplemented with the touching and holding technologies of mobile phones and gaming consoles. (Boellstorff 2008, Goggin 2011, Turkle 2011).

This chapter investigates the complex historical form of the media's role in what Walter Benjamin termed the 'technological sensory training' of the subject. He had argued that technologies had "subject [ed] the human sensorium to a complex kind of training…(and that) during long periods of history, the mode of human sense perception changes with humanity's entire mode of existence. The manner in which human sense perception is organized, the medium in which it is accomplished, is determined not only by nature but by historical circumstances as well." (Benjamin1971: 216) Subsequent writers have understood this training to involve a transformed 'logistic of perception'. (Virilio 2009) or to have involved a 'restructuring of perceptual experience.' (Crary 1999) This restructuring of sensory experience has involved the simultaneous enhancement and restriction of the sensory experience of the world; by having enhanced the senses of sight; sound and more recently touch to the exclusion or diminishing of the other senses. The world, others and the subjects own cognitive processes are reconfigured by this transformed sensorium.

Of central concern to the present analysis does the German philosopher Heidegger who observed that articulate the way in which the mediated experience of the subject has subjected it to a transformed understanding of place and space as:

"The frantic abolition of all distances brings no nearness; for nearness does not consist in shortness of distance. What is least remote from us in point of distance, by virtue of its picture on film or its sound on the radio, can remain far from us. What is incalculably far from us in point of distance can be near to us." (Heidegger 1993)

Heidegger, writing in the late 1940s points to the multi-sensory transformation of space embodied in media use. Marshall McLuhan had proclaimed in the 1960s that

the world had become a 'global village', an issue returned to in the 1980s by Joshua Meyrowitz who was concerned to re-evaluate the nature of place and space through media consumption. He argued that, "electronic media destroy the specialness of place and time. Television, radio, and telephone turn once private places into more public ones by making them more accessible to the outside world...Through such media, what is happening almost anywhere can be happening wherever we are. Yet when we are everywhere, we are also in no place in particular " (Meyrowitz 1985: 125).

From this transformation of mediated experience has come the assumption that the very nature of the relation between direct and mediated experience has been challenged in the 20th century. When the historian of technology, Lewes Mumford claimed in the 1920s that social experience in the 20th century increasingly consisted of "the sensations of living without the direct experience of life," he was making a judgment on the nature of mediated experience in a world increasingly dominated by a wide variety of mass media. Mumford's judgment was framed by comparing 'direct' experience with 'mediated' experience in which direct experience was deemed to be the superior. More recently, Sherry Turkle has re-iterated this appeal to the direct in relation to the use of MUDs when she argued that, **"**we are moving toward a culture of simulation in which people are increasingly comfortable with substituting representations of reality for the real." (Turkle 1995:23) Implicated in this loss of the phenomenological dimension of lived experience is the abolishment of distance, highlighted by Heidegger that is involved in the very nature of mediated experience. This view is central to Douglas Kellner's understanding of the sensory impact of the media in the 20th century:

"Each technology is a window to the outside world, obliterating urban boundaries and spaces to the geopolitical channels of the global world and the world of atopic cyberspace. Exposed to global culture and communication, the city loses its specificity and city life gives way to technological cyber life, an aleatory, heterogeneous and fractured space, and a world-time that enables individuals to experience events simultaneously from every time zone in the world." (Kellner 1999:107)

With this progressive rise of 24 hour connectivity and virtuality has come a collective "hallucination of presence" (Cary 2013). Integral to this ' hallucination of presence'

has come what some have referred to as the militarization of sensory experience. This can be understood directly as in Goodman's account where he stated that, "From Hitler's use of the loudspeaker as a mechanism for affective mobilization during World War 11, through to Bin Laden's audiotaped messages, the techniques of sonic warfare have now percolated into the everyday." (Goodman 2011: 5) Theorists such as Frederick Kittler have maintained that this 'militarization' occurs in the very disciplining of the sensorium itself, that entertainment itself has become militarized. Virilio who argued that further articulates this position:

"One can notice the way in which the field of perception of war and the battlefield developed, simultaneously, at the same time. At first, the battlefield was local, and then it became worldwide and finally became global, which means satellized with the invention of video and the spy satellites of observation of the battlefield. So at present, the development of the battlefield corresponds to the field of perception enabled by the telescope and wave optics, the electro-optics, video, and of course infography, in short all the media." (Virilio 1989:64)

The entertainment industry feeds into the military and vice versa through radio, film and video games. For example Deaville in his analysis of CNN coverage of the Gulf War of 1991 argued that it coverage involved "coordinating all production elements - titles, graphics, still and moving images, music, diegetic sound, narration, live broadcasting - around the crisis to create a spectacle that tapped into the audiences experiences with film and video games." (Deaville: 114) In addition to this Virilio argued that the very experience of cinema and later television was aligned to the experience of flying with its manipulation of space and depth through movement and with the panning of shots and the like. (Virilio 1989) The impact of this transformed sensorium upon the subject's ability to understand and reflect upon experience was understood as a consequence of this increasingly saturated media environment.

Linked to this 'transformed sensorium' was the very nature of the senses moral compass. Both Walter Benjamin and Theodor Adorno made the synergy between technological developments, the media and morality. Adorno had noted in the 1960s that history was a narrative 'leading from the slingshot to the megaton bomb' (Adorno 1981:320) whilst Benjamin had written in 1930 at the outset of German fascism of "the gaping discrepancy between the gigantic power of technology

and the miniscule moral illumination it affords." (Benjamin 1999:318) More recently Jonathan Crary has noted in relation to media consumption "the most important recent changes concern not new machines of visualization, but the ways in which there has been a disintegration of human abilities to see, especially of an ability to join visual discriminations with social and ethical evaluations." (Crary 2013: 33) The ability to discriminate itself was perceived as a partial function of the speed and volume of media messages "in which the range of responsive capacities are frozen or neutralized." (Crary 2013:34)

In the following pages an historically informed understanding of the mediated sensorium and its connections to distance, sociality, militarization and an ethical compass is presented through a series of historically overlapping analyses that encompass the visual, the auditory, the immersive and the tactile. Embedded in the following analysis is an understanding of the ambivalent nature of sensory enhancement and diminishment articulated through the multiple use of a wide range of media technologies. The analysis culminates in a brief analysis of 9/11 and its aftermath, events that encompasses all of the media technologies of the 20th century.

Mediated Multi-sensorality 1:Looking and Listening.

Prior to World War One the French artist, Ferdinand Léger observed, " a modern man registers a hundred times more sensory impressions than an eighteenth century artist." Léger was referring to the speeding up of sensory experience that was a product of technology, the media and urban life in general. At the time of making this observation Léger had not predicted the oncoming war and the resultant 'war on the senses' that ensued or his involvement in it. Léger's own senses became overwhelmed and destroyed in a mustard gas attack in the Battle of Verdun in 1916. On returning home his vision of art and humanity was transformed – becoming ' machinic' thus mirroring his experience of trench warfare. In the early 1920s he ventured into filmmaking producing an experimental picture entitled '*Ballet Mecanical'* a film in which the body and the everyday was presented mechanistically by repetitively focusing in with close ups of eyes, mouths and legs. Everyday activities were repeated and multiplied from a myriad of different angles, close up and angular. The film was played to the machinic rhythm of the music of American composer George Antheil.

The sensory 'reality' of the trenches experienced by Léger produced an inescapable sensory overload unimaginable in the sensory and distanced

glorification of war embodied in the Futuristic writings of Marinetti and Luigi Russola and the propagandist glorification the war experienced 'second hand' from the comforts of distant news-desks in Paris and London. The very intensity of warfare led many combatants to feel a sense of alienation whilst on leave at home with the war seeming more real than the peace itself. The trauma of wartime experience itself took years for many of the combatants to articulate in novels, films and memoirs with the most noted occurring in the late 1920s and early 1930s. (Sassoon 1931, Williamson 1930). Embedded in the mindset of writers, artists and intellectuals as a result of World War One was the dislocation and transformation of sensory experience coupled to the propagandist potential of 'experience at a distance.' Themes that would continue throughout the multiple conflicts of the 20th century.

Léger's film appears to act as a bridge to Walter Benjamin's subsequent observation on the ability of film to transform what it meant to look –technologically – in the 20th century:

> "By close ups of the things around us, by focusing on hidden details of familiar objects, by exploring commonplace milieus under the ingenious guidance of the camera, the film, on the one hand, extends our comprehension of the necessities which rule our lives; on the other hand, it manages to assure us of an immense and unexpected field of action…With the close up, space expands, with slow motion, movement is extended. The enlargement of a snapshot does not simply render more precise what in any case was visible, though unclear: it reveals entirely new structural formations of the subjects impulses." (Benjamin 1971: 230)

Benjamin in the above quote chose to focus upon the mediated proximity of the filmic look, which he interpreted as extending the sense of vision into an optical unconscious. Audiences that experienced Léger's film experienced it both visually and through the sound of its musical accompaniment - as an audio-visual experience experienced in a darkened auditorium –away from the hustle and bustle of everyday life. This experience of distancing from 'direct' experience was articulated in Susan Buck Morss's description of filmic viewing that focused upon it in terms of a

'phenomenology of looking' that bracketed out that which was exterior to the 'dreams' portrayed on the screen:

"Going to the movies is an "act of pure seeing" if ever there was one. What is perceived in the cinema image is not a psychological fact, but a phenomenological one. It is "reduced," that is, reality is "bracketed out." (Susan Buck Morss in Serematakis 1992: 46.)

The space of the cinema, from this perspective, became the totality of the world - a dream factory - whereby audiences temporarily suspended reality through acts of intense sensory immersion. The suspension of the reference to which the image might refer was later taken up by Baudrillard and others in their notion of simulation – the separating out of subject and object, which was itself, appeared to be problematized in the work of Heidegger. Heidegger's position was supported by Virilio who mourned "the loss of the phenomenological dimension that privileges lived experience." which paradoxically represented an inversion of Susan Buck-Morss's phenomenological bracketing out of the 'real' world.

With the introduction of synchronized sound movies in the late 1920s, with their attendant greater 'realism' cinema audiences soared reaching some ninety percent of the American population in 1930. The newly developed sound track of film produced an auditory re-training to complement Benjamin's visual 'optical unconscious':

"Acoustic close-ups make us perceive sounds which are included in the accustomed noise of day-to-day life, but which we never heard as individual sounds because they are drowned in the general din…in the sound film, scarcely perceptible, intimate things can be conveyed with all the secrecy of the unnoticed eavesdropper. The general din can go on, it may even drown completely a sound like the soft piping of a mosquito, but we can get quite close to the source of the sound with the microphone and with our ear and hear it nevertheless." (Balazs 2011:176)

Sound, according Balazs, reconfigures 'reality' in the filmic image to achieve it's own version of audio-visual veracity. However, the experience of early cinema was not merely an audio-visual experience but was rather a more multi-sensory one. Kracauer captured the multisensory assault on the senses with the following description of cinema going in Berlin:

"This total artwork of effects assaults all the senses using every possible means. Spotlights shower their beams into the auditorium, sprinkling across festive drapes or rippling through colorful, organic looking glass fixtures. The orchestra asserts itself as an independent power, its acoustic production buttressed by the responsory of the lighting. Every emotion is accorded its own acoustic expression and its color value in the spectrum - a visual and acoustic kaleidoscope that provides the setting for the physical activity on stage: pantomime and ballet. Until finally the white surface descends and the events of the three dimensional stage blend imperceptibly into two-dimensional illusions." (Kracauer 1995: 324)

Kracauer's multi-sensory description of the experience of the cinema house resembled the multisensory experience of amusement parks, which were also popular in the 1920s. Kracauer's description of cinema going in Berlin was mirrored in New York. When the Roxy Cinema opened in March 1927 it was heralded as the "Cathedral of the Motion Picture" with its luxurious hybrid Renaissance and Gothic design. The film, as in Kracauer's description of cinema going, was merely one part of an extravagant show. The Roxy at this time had its own 110-piece orchestra, which would play classical overtures and support ballet performances by the Martha Graham Dance Company amongst others. Films were screened at the end of the performances on a gigantic, larger than life screen, thereby amplifying the distance between the everyday experience of the viewer and the 'reality' of the film screen.

A dominant theme that ran through film was flight itself, from the movement of the camera to the depiction of flight itself. Fritz Lang's popular movie of the time, *Frau im Mond* futuristically and realistically depicted the launch of a space craft to the moon to audiences in Berlin in 1929. The film was

later withdrawn in Nazi Germany in the 1930s as Fritz Lang recounted, "The launching of the rocket in the film however was so authentic in all its technical details as were the drawings, that the Nazis withdrew the film from distribution. Even the model of the space ship was destroyed by the Gestapo, on account of the imminence of V1 and V2 rockets on which Werner von Braun was working from 1937 onwards." (Eisner 1976:110) The first V2 rocket launched and successfully dropped on London had the Frau *im Monde* logo pained on its base. Filmic image and direct experience became fatally joined. Prior to this in New York, one month after its opening, the Roxy showed its first sound film of the American aviator Lindbergh taking off on the first Atlantic flight to Paris recorded earlier that day – itself a landmark of the time between the filming of an event and its showing.

Mediated reality of the cinema was largely a black and white experience with color film only slowly being introduced in the 1930s through such films as *The Wizard of Oz.* Parallel to this however was a continuing reliance on black and white especially in newsreels, indeed, with the rise of television in the 1950s black and white was the norm until in the late 1960s when color televisions were introduced.

With the coming of World War Two the media went into overdrive in its depiction of war. Audiences would flock to the cinema to watch *Movietone War News* narrated by Lowell Thomas who in the 1920s had made T.E. Lawrence a household name with his world series of talks and shows of Arabia in World War One. Flight and the cinema continued through World War Two and after with a wide range of propaganda movies such as Casablanca and into the Cold War era. The 1950 movie *Destination Moon* portrayed the attempt to control the world militarily by controlling the moon thus feeding into Cold War fear of the 'other'. The film portrayed the crash of an early rocket prototype that was hauntingly reminiscent of the images of the Challenger disaster that were broadcast live in 1986. The film itself provided the blueprint in the 1950s for the most popular ride in the newly opened Disneyland theme park:

"The jewel in the crown of Tomorrowland, however, was Rocket *to the Moon, a Hale's Tour* - style ride to outer space. *Rocket to the Moon* seated riders in a

theatre inside a mock rocket ship. As seats rocked and ambient sounds signaled liftoff, rocketeers could watch animation of the receding earth on a movie screen underneath the transparent floor and views of where they were headed on a movie screen directly in front of them. The ride took them around the moon and back home again…*Rocket to the Moon* remade the fantasy of from visiting a destination that fulfilled the modern urbanite to the fantasy of being inside a movie… Rocket to the Moon harnessed the exhilarating sensations of kinesthesia and speed for the cinema…it is much easier to simulate reality when the reality being depicted is already a movie." (Rabinovitz 2012: 167)

Disney paradoxically reintroduced kinesthesia into mediated leisure precisely at the time of the mass introduction of television that heralded the decline of cinema going. Small domestic screens progressively replaced large public screens. First with early television screens in the 1950s and then by computer screens in the 1980s. Miriam Hansen has recently noted that film, originally larger than life when viewed in the picture palaces of the past 'seems to be dissolving into a large stream of global and globalizing audio-visual, electronic, digital, and web-based moving image culture." (Hansen 2012: xvi) The new media environment is one dominated by small-screen realities.

Within this small screen reality- tele-vision literally meant vision at a distance - the exceptional became juxtaposed with the exceptional as mass audiences could watch the Coronation of Queen Elizabeth the Second in 1952, the assassination of the president of the United States in 1963 and the first man to land on the Moon in 1969. This was coupled with the progressive portrayal of everyday life through the creation of popular 'soaps' such as I *Love Lucy* in 1950s America and Coronation *Street* in the UK in 1960. In addition to this television portrayed the world's conflicts from Suez through to Vietnam, Kosovo and the first Gulf War in 1991. In doing so television appeared change the relationship between the social world and the 'interior psychic landscape, scrambling the relations between these two poles." (Crary 2013: 81)

Central to this ethical perspective was the viewing of war, which to paraphrase Adorno, had progressed from the Newsreel as embodied in World War Two reporting, to the 'live' twenty four hour broadcast embodied in the first Gulf War of 1991. Baudrillard understood this in terms of the substitution of

'reality' by the image in the media coverage of the war in Bosnia, "In our fear of the real, of anything that is too real, we have created a gigantic simulator. We prefer the virtual to the catastrophe of the real, of which television is the universal mirror." (Baudrillard 1995:50) With the first Gulf War in 1991 came twenty-four hour live coverage beamed into the living rooms of the world. The sensory nature of 'experience at a distance' illustrated by filmmaker Steven Spielberg who filmed the 1993 movie Schindlers *List* largely in 'black and white'. He cited the reason for this as people's memory of World War Two had come from the black and white newsreels of the time. Claude Lanzmann, the director of 'Shoah', an eight-hour documentary on the holocaust, shot in color, replied that the victims had experienced the war in techocolor. (Lanzmann 2012:186)

The sensory enhancement and sensory diminishment of mediated experience was articulated in the representation of 'live' warfare in the Gulf War as Feldman aptly described:

"Their broadcast images functioned as electronic simulacra that were injected into the collective nervous system of the audience as antibodies that inured the viewer from realizing the human-material consequences of war. Visual mastery of the campaign pushed all other sensory dimensions outside the perpetual terms of reference. Culturally biased narrations abetted by informational technology historically molded to normative concepts of sensory truth precluded any scream of pain, any stench of corpse from visiting the American living room…Civilian television observation was continuous with the military optics of the fighter pilot and bombardier who were dependent on analogous prosthetic technology, and who killed at a distance with the sensory impunity and omniscient vision of the living room spectator. The combat crews who played with aggressive drives by watching pornographic videos prior to flying missions, demonstrating the uniform sensorium between viewing and violence as they up-shifted from one virtual reality to another." (A. Feldman in Serematakis 1992: 92-93)

The very transience and ubiquity of media experience has transformed perceptual capability from this perspective. William Stam brought an ethical dimension to this insight, quoted by Morley "that, television news flatters its "armchair imperialist viewers" into adopting a subjective position as "the audio visual masters of the world", and the "guarantee" which television offers them is the "illusionary feeling of

present-ness, this constructed impression of total immediacy…a televisual metaphysics of presence." (Morley 2000: 185)

Mediated Multi-Sensuality Two: Sound and Vision

Whilst it was an increasingly common event for people to regularly visit the cinema in the 1920s, increasingly they could stay at home and listen to the new novelty: radio. Sound technologies, as distinct from more visually based technologies, had produced their own specific relationship between the real and the virtual beginning with telephony, the technology that separated time, place and presence, as Peters notes, "the succession from the "singing wire" (telegraph), through the microphone, telephone, and phonograph to radio and allied technologies of sound marks perhaps the most radical of all sensory reorganizations in modernity." (Peters 1999:160) Frances Dyson has recently commented upon the intimate relationship between sound technologies and immersion; “Sound is the immersive medium par excellence. Three dimensional, interactive, and synaesthetic, perceived in the here and now of an embodied space, sound returns to the listener the very same qualities that media mediates: that feeling of being here now, of experiencing oneself as engulfed, enveloped, enmeshed, in short, immersed in an environment. Sound surrounds.” (Dyson 2009:4).

Mediated sound as embodied in the gramophone and radio also worked to valorizes the ‘here and the now’ creating a sense of mediated we-ness. The phrase derives from the work of Adorno who argued that the consumption of mechanically reproduced music was increasingly used as an effective substitute for a sense of connectivity that modern cultures lacked. We-ness refers to the substitution of direct experience by technologically mediated forms of experience. Sound media represented to the urban subject a utopian longing for what they desired but could not achieve, producing, “an illusion of immediacy in a totally mediated world, of proximity between strangers, the warmth of those who come to feel a chill of unmitigated struggle of all against all.” (Horkheimer and Adorno, 1973:46) The notion of what constituted sociality in a transformed media space was further influenced by the development of a range of sound technologies from the amplifier, the speaker and the microphone. Early radio for example, before the advent of the loudspeaker, which subsequently was encased in

the radio, was often listened to through headphones paradoxically privatizing the space of listening within the household. Heidegger had pointed to the role of media technologies in abolishing, or creating cognitive confusion, in the experience of distance. Heidegger's observation is demonstrated in Siegfried Kracauer's description of early domestic radio listening:

> "Who could resist the invitation of those dainty headphones? They gleam in living rooms and entwine themselves around the heads all by themselves… one becomes a playground for Eiffel noises …silent and lifeless, people sit side by side as if their souls were wandering about far away. But these souls are not wandering according to their own preferences; they are badgered by the news hounds, and soon no one can tell who is the hunter and who is the hunted." (Kracauer 1995:333)

Jonathan Sterne argued that this audile individuation which is recognized in Kracauer's quote "was rooted in a practice of individuation: listeners could own their own acoustic spaces through owning the material component of a technique of producing that auditory space - the "medium" that now stands for a whole set of practices. The space of the auditory field became a form of private property, a space for the individual to inhabit alone." (Sterne 2003:160) Technologies and values following Benjamin appeared indissolubly linked. From the birth of the radio, gramophone through to the Walkman, a central facet of Walter Benjamin's 'sensory training' has been the desire for immersive sonic experience, which appeared to transform both the private space of the living room and the public space of the street, often unifying or blurring the distinction between the two. As early as the 1930s the Lynd's described the public role of radio listening in the following terms, "when walking home in the hot summer evenings after window shopping on Madison Street," a Chicago man recalls, "one could follow the entire progress of Amos *'n' Andy* from the open windows. By the 1940s, even in small towns like Honea Path, South Carolina, it was possible to "practically hear the whole of Grand *Ole Opry*" as it issued out of every house on the block." (Quoted in Loviglio 2005 xiv)

The power to transform space politically through the development of sound technologies was recognized by Hitler in the early 1930s:

"The loudspeaker was invented by an imperialist, for it responded to the desire to dominate others with one's own sound. As the cry broadcast distress, the loudspeaker communicates anxiety. "We should not have conquered Germany…without the loudspeaker," wrote Hitler in 1938." (Shafer1994: 91)

Subjects learnt how "to be" in the world by listening to the propagandist voices of Hitler, Roosevelt and Churchill. The power of the radio to engender feelings of 'we-ness' within a transformed space was demonstrated in the following diary entry of Maggie Blunt on the announcement of the end of World War Two in 1945:

"Listening now to the repeat broadcast of General Montgomery from Germany this afternoon. My emotions at this moment are indescribable: enormous pride in the fact that I am British, wonder and excitement. "Tomorrow at 8 a.m. the war in Europe will be over…" The war in Europe is over…this is a tremendous moment…I have been down and turned off the radio. For once I waited to hear the whole of the National Anthem, moved suddenly again to tears by this historic, this incredible moment. I stood with my hand on the radio switch listening to the National Anthem and to the voices of a thousand, thousand ghosts. They came over the air into that unlit, silent room, I swear." (Garfield. 2004:16)

Sound media increasingly conditioned the experience of space from the dulcet tones of Roosevelt's radio fireside chats in the 1930s and 40s, to the growth of television in the 1960s. Subjects learnt how to sit in the comfort of their homes with the mediated world flowing in, coded in waves of invisible radiation that beamed in domestic technologies such as the television. This mediated world - an audiovisual, one-dimensional representation lured the subject with the very compression of its signal, to produce the appearance of "objectivity" in subjects encounter with the world. From the dulcet tones of Roosevelt's fireside chats, to the sounds of De Gaul's Free French broadcasts from London in World War Two,

to the Voice *of Fighting Algeria* heard by Fanon in Algeria in the 1950s, to the colonial sounds of "Hello, London Calling" emitted by the BBC throughout Britain's colonies: sound both colonized and repelled. The 1938 broadcast by Orson Wells Mercury Theatre's thirty minute production of H.G. Well's *War of the World* in mimicking live news broadcasts provoking panic amongst many American listeners who suspending their knowledge of 'real-time activity' by fleeing their homes in fear of a supposed attack by aliens. (Heyer 2005)

The *Stalin Radio* in the Soviet Union, a simple box installed in all apartment blocks that recipients couldn't turn off, only down and through which *The Party* pronounced its political line on all things; playing only Party-approved music and presenting Party-approved dramas and variety shows. This totalitarian sound world was replicated in the middle of the Guyanian jungle in Jonestown as Rebecca Layton, one of Jonestown's few survivors of the mass 1978 suicide recounted, "In Jonestown there was a speaker system and only Jim Jones spoke on it and it went 24 hours a day, and he would tape himself so – in the middle of the night – all through the night his voice was talking to you."(Layton 1988: 86)

With the development of the domestic speaker in the 1920s radio listeners were freed from the constraints of headphones and could listen collectively to the radio as they moved around their homes. This limited mobility was then paradoxically replicated by the re-introduction of headphone use with the development of the Walkman in 1979, a technology that was itself prefaced upon the development of the cassette in 1963. Unfortunately, Rebecca Layton and her companions in Jonestown were not allowed to bring Walkmans into Jonestown. If they had they would have at least been able to create their own alternative soundworld.

William Gibson, the science fiction writer credited with thinking up the notion of 'virtual reality' commented upon the radical transformative nature of the Walkman, "the Sony Walkman has done more to change human perception than any virtual reality gadget. I can't remember any technological experience since that was quite so wonderful as being able to take music and move it through landscapes and architecture." (quoted in Bull 2000:7) Walkman users frequently described their experience of moving through cities as 'filmic' in

nature. City streets would take on the quality of the music that they listened to. Users would often choose music which they considered would 'suit' the environment passed through, thus transforming users perceived power over their environment. Historically it was thought that city dwellers were dependant upon the existing physicality of cities, for example the French anthropologist Marc Augé had described cities in terms of 'non-spaces'- semiotically void of interest by which he meant shopping centers, car parking lots and the like. Now, users were able to re-create meaning for themselves mediated though the music listened to.

Walkman users became increasingly used to experiencing not just the world but also their own cognitive states through the mediated sounds of their machines. Mediation increasingly became a form of 'second nature' for many users, as one Walkman user recounts, "I wear it all the time, like a pacemaker! A life support machine! It's like I'm a walking resource centre." (Bull 2000: 17). Control of thoughts, emotions and desires became central to the daily management strategies of Walkman users. Music listened to permitted users to order their thoughts, feelings and outlook towards the world as desired. The choice of personalized music frequently set the mood of the day as users left their homes listening to their chosen music. Through the use of these technologies users created technologically mediated sanctuaries out of much of their experience permitting them to feel 'centered' wherever they might be.

The use of mobile phones furthered this privatizing impulse in 20th century culture, and by the late 1990s its use had permeated all areas of social life (Castells 2007) rearranging the meaning of, and relations between work and home, of leisure and sociability itself. Mobile phones became an integral tool in the management of everyday life. In doing so the nature of public space has been further transformed. Connor has argued that the very meaning of social space is "very largely a function of the perceived powers of the body to occupy and extend itself through its environment."(Connor 2000:12) The sound of the voice colonized the space it inhabited, and mobile phone talk was everywhere in the 1990s. Local customs of reserve become progressively eroded as individuals mobile-phone users become more assertive in their public demonstration of talking to absent others. (Castells 2009) Urban space became decontextualised as the intimacy of the home was recreated in

the public spaces of the street. A denuded public space was transformed into a privatized intimate space in which 'private' life gained greater visibility in a "public sphere emptied of its substance." This very prioritization had relational consequences and spoke to the progressive prioritization of private space over shared social space in the 20th century.

Vision, Sound and Touch: Militarizing the Senses

In 1983, whilst visiting the Walt Disney Centre in Florida to talk to children from the International Youth Initiative, the American President, Ronald Reagan had this to say about sensory training and the media:

"Many of you already understand better than my generation ever will the possibilities of computers. In some of your homes, the computer is as available at the television set. And I recently learned something quite interesting about video games. Many young people have developed incredible hand, eye, and brain coordination in playing these games. The Air Force believes these kids will be outstanding pilots should they fly our jets. The computerized radar screen in the cockpit is not unlike the computerized video screen. Watch a 12-year-old take evasive action and score multiple hits whilst playing "Space Invaders," and you will appreciate the skills of tomorrow's pilot."

The militarization of the senses alluded to in Reagan's speech and the attendant surveillance institutionally, corporately and individually seeped into the monitoring of consumer behavior through a range of visual tracking devices, state security systems and the interpersonal use of media through processes of self monitoring and the monitoring of others. This multi-sensory engagement with the world has increasingly become virtual in the latter part of the 20th century. On the one hand it appears to confirm Mumford's view of media experience was one of "the sensations of living without the experience of living." This position has been challenged by cyber-optimists such as Howard Rheingold who argued that "people in virtual communities do just about everything people do in real life, but we leave our bodies behind…To the millions who have been drawn into it, the richness and vitality of computer linked cultures is attractive, even addictive." (Rheingold 1993) In this section I analyze virtuality through the lens of the multi-sensory militarization of experience. The

symbiotic relationship between new media technologies, products and the military has become widely recognized. For Frederic Kittler "media technologies discipline, mutate, and preempt the affective sensorium. Entertainment itself becomes part of the training." (Goodman 2011: 34) This view echoed Theodor Adorno's earlier critique of the culture industry that amusement was merely work by other means – thus tying the culture industry to the industrial complex – of which in Virilio's view the military complex formed an integral part. Virilio argued that "the deadly harmony that always establishes itself between the functions of the eye and weapon…seems complete now as weapons "open their eyes" examples include "heat seeking missiles, infra red and laser guidance systems, warheads fitted with video cameras." (Virilio: 1989: 83). The tactile power embodied through the use of the television remote controller which first entered the American home in 1956 enabling the user to control the workings of the television set at a distance was further cemented in the computer's mouse and the video game gamepad and joystick. For Kittler objects these became prosthetic extensions to the body.

The overt conjunction of gaming to military expertise was commented upon by Biocca and Levy, "The distant transmission of information –especially sensory information – is the driving desire pushing the envelop of virtual reality. In his greeting at the first IEEE Virtual Reality Annual Symposium, Tom Furness (1993), Air force VR pioneer and leading engineer researcher, proclaimed that," advanced interfaces will provide an incredibly new mobility for the human race. We are building transportation systems for the senses…the remarkable promise that we can be in another place or space without moving our bodies into that space.""(Biocca and Levy 1995:23)

Both air force personnel and game users merge into one through the technologies embodied in the games themselves. The use of Drone technology from the 1980 was fueled by military innovation such as The Joint Simulation System (JSIMS), which trained operatives in the use of Drone aircraft. The program itself was based on the 3D graphics used in the computer game Wargame and was aimed at both military personnel and the gaming public. The use of drones themselves mirrored the development of video games dating back to the 1970s where they were used by the Israeli military to gather intelligence. They were transformed into killing machines after the 1999 Nato Kosovo campaign. (Benjamin 2013). With the introduction of this technology troops themselves began to question the necessity to physically go to war. In 2000 the Daily

Telegraph reported, “The Israeli dot-com generation seems not to have the stomach for mortal combat (Israeli withdrawal from Lebanon). They have started to ask why they should risk their lives when precision weapons can reduce war to a video game. For the pony-tailed youth of Tel Aviv’s night spots, the war in Lebanon was becoming their Vietnam and they would rather their government fought it by remote control.” (In De Derain: Xxxii) The rise of virtuality, the moral ambiguity of sensory distance, and the militarization of the senses is exemplified by the use of drones, as one operative said, “It’s like playing a single game everyday but always sticking on the same level.” (Darwent 2013:52)

At the turn of the 21st century, the inhabitants of the mountain regions of Pakistan found themselves subject to attack from the air by US “drone” fighters. Drone is the nickname for unmanned aerial vehicles (UAVs). These planes, equipped with sensors, color, and black and white TV cameras, image intensifiers, infrared imaging for low light conditions and lasers for targeting brought an alternative type of death from the air from that of 9/11. While drones are unmanned they are not unpiloted; rather they were usually directed from thousands of miles away, back at base camp in Nevada. Pilots used the visual data proffered by the cameras on the Drone to locate targets and decide whether to attack or not attack. Judgment is embodied in the two dimensional image of the console screen engaged with by the operative.

The 20th century saw an unprecedented development of sophisticated unmanned ‘death at a distance’ technologies – from the V2 flying missiles responsible for countless ‘invisible’ deaths on the South coast of England in 1943 to the smart bombs that were deployed in the Operation Desert Storm in Iraq in 1991-92 to the mountains of Pakistan. One local resident of the latter area stated: “Why would we not be scared, drones are always on my mind. It makes it difficult to sleep. They are like a mosquito. Even when you don’t see them, you can hear them, you know they are there.” (Friedersdorf: 2009) Markets, funerals, weddings, schools, any number of public meeting places have been victim to Drone attacks. As Said Farhad Mirza claimed, “We can’t go to the markets. We can’t drive cars. When they’re hovering over us, we’re all scared. One thinks they’ll drop it on our house, and another thinks it’ll be our house, so we run out of our houses. (Friedersdorf ibid)” Sitting in their control rooms in Nevada, the towns, cars, and streets of Pakistan might well have appeared “tangibly present” to the controllers of the Drones. Through the

use of haptic interfaces "distant or virtual objects give the illusion of being immediately present."(Patterson in Classen 2005:434)]

Walter Benjamin's discussion of the sensory transformation of sight, distance and proximity through an engagement with film and photography is extended and enhanced through video game playing and by extension to a 'warring' of our sensory abilities in which reality and the game have become intertwined**.**

It has been found that video game playing appears to help users 'improve their spatial resolution, meaning their ability to clearly see small, closely packed together objects, such as letters…these games push the human visual system to the limits and the brain adapts to it." (Bevalier 2007) Thus recent developments appear to support Benjamin's claim that the media retrains the subject's sensorium. Equally, the virtual terrains within which the games players interacted and in which they immersed themselves were note not so dissimilar to the 'real' theatre of war that many British and American soldiers encountered and others find themselves in:

> "The construction of Arab cities as targets for US military firepower now sustains a large industry of computer gaming and simulation. Video games such as America's *Army* and the US Marine's equivalent, *Full Spectrum Warrior,* have been developed by their respective forces, with help from the corporate entertainment industries, as training ads, recruitment aids and powerful public relations exercises. Both games –which were amongst the world's most popular video game franchises in 2005 - centre overwhelmingly on the military challenges allegedly involved in occupying and pacifying, Orientalized Arab cities." (Graham 2006:265)

Not only were and are game scenarios frequently modeled on the image of a physical environment found in Pakistan and other essentialized Middle Eastern environments but the very representation of the enemy is a contemporary example of demonization developed through propaganda techniques from World War One onwards. The games themselves have a great concern for visual and aural fidelity and environmental cues: "For added realism, footsteps, bullet impacts, particle effects, grenades, and shell casings are accorded texture-specific impact noises. A flying shell casing clinks differently on concrete, wood, or metal, for instance, and the distinction is clearly

heard in the game. Likewise, footsteps on dirt, mud, wood, concrete, glass, and metal are sounded correctly." The game's goal of sensory verisimilitude sets an expectation for political verisimilitude." (Bogost 2008: 78)

The 'real' is thus rendered as a three dimensional copy on the screens of both consumers of games and military personnel till they become virtually indistiquishable for the viewer, but not, of course, for the inhabitant. Experience has moved from 'just like a movie' to 'just like a video game'. As Graham goes on to state, "When people are represented, almost without exception, they are rendered as the shadowy, subhuman, racialized Arab figure of some absolutely external 'terrorist' - figures to be annihilated repeatedly in sanitized 'action' as entertainment or military training or both." (Ibid 266) Distance dissolved through the screen does not invoke empathy. Rather individuals become 'aliens' on the screen of the Apache helicopter, or more distantly on the screens of the Nevada control centre. The operators squeeze their controls - and fire.

Conclusion: Experiencing 9/11

Heidegger had argued that the media destroyed the sense of space in the mediated world of the 20th century. In doing so, following Benjamin, the impact that this transformed sense of the social has had on the subject's moral compass and the militarization of their sensory orientation to the world has become apparent in the synergy between computer gaming and warfare as argued in the previous section of this chapter. This is not to claim that militarization is the only form of training to have taken place. Paradoxically, the simultaneity of experience in the networked society, has for some made the global world smaller, not larger - from the eye to the screen:

"The capacity of interaction, interactivity will reduce the world, real space, to next to nothing. So, soon, in the future men will have a feeling of being shut up in a very small world…I think that, just as Foucault talked about this feeling of being shut up in prison, the future generation will have this feeling of being shut up in the world, of incarceration which will certainly be on the verge of the unbearable. The last image: interactivity is to real space what radioactivity is to atmosphere. It's destructive." (Virilio in De Derain: 69)

It has been noted that the sensory mix embodied in the progressive use of a wide range of media technologies from the radio to the Internet involve multiple sensory configurations. For example, sonic presence has been frequently understood in terms of its 'corporeal immediacy' (Alter & Koepnick 2005) and its 'phenomenology of presence'. thus distinguishing it from the traditionally understood visual nature of experience, which was, understood as inherently 'objectivist' and 'rational'. However, recently the visual has been though to inhabit the same spheres of connectivity and intimacy as the sonic. The work of Laura Barker (2009), Chouliaraki (2006) and Marks (2000) in their work on the sensory qualities of film have attempted to re-appropriate the qualities and language of the auditory into the visual connectivity of film. This was interpreted as part of a wider re-appropriation of the qualities of the auditory in the sensory field of new media where the immersive qualities of new media were viewed as paramount (Dyson 2009). If we were to apply these insights to the event that, in terms of media use, provide the end point to media developments in the 20th century – 9/11 – then the enhancement and diminishing of the mediated sensorium appear more traditional in their configuration.

Susan Sontag commented some years ago that the viewing of the pain of others at a 'distance' was 'one of the distinguishing features of modern life.' (Sontag 2004) More recently Lilia Chouliariki has described the live images of the moment the second plane hit the World Trade Centre on September 11th 2001, which were captured live on television and watched by over two billion people around the globe on that day, as "ecstatic"; a time sequence in which time itself appeared to freeze:

"There is an extended sequence of the live footage, which provides us with a long shot of the Manhattan cityscape in grey smoke. Filmed from an Ellis Island crane, the long shot again creates an aestheticized effect, whereby the scene of suffering appears as a spectacle to be contemplated rather than acted upon. Confronting us with the sublime quality of human tragedy, this management of visibility removes the urgency of the 'here and now' and opens up a space of analytical temporality, providing us with the option for reflection on the events." (Chouliaraki 2006: 10)

The events of 9/11unfolded primarily on the world's television screens through a mixture of studio presentation, hastily composed live shots from mobile camera crews on the ground and telephone interviews with New Yorker's who were 'witnessing' the events live. Spectators from around the world primarily experienced 9/11 through distant live news footage. The live studio coverage on the ABC television network news showed the images of the burning World Trade Centers on a screen that the presenters and the millions of viewers watched simultaneously. Distant and close ups of the exterior of the buildings alternated, and later the image split into a double screen with images of the Pentagon – also aflame. Viewers listened to a voice over in which the presenter talked the audience through the images and what little they themselves knew of the event. The newscasters in the studio viewed the same visual frames as the audience - distant and silent - whilst simultaneously gathering news from onlookers and others. The television audience experienced – or viewed – the silent and fast trajectory of the second jet aircraft hitting the World Trade Centre and in subsequent minutes witnessed the collapse of both Tower One and Two: the audience became global immediate witnesses. Paradoxically, the newscasters themselves missed these events - their gaze on the cameras in front of them – not on the images behind – the imaged beamed out to the world in silence, divorced from the blood, smell, heat or sound of the events unfolding before their eyes. As Zelizer comments - there were no bodies. When images of falling people jumping to their deaths in silence were briefly shown, they were quickly removed from subsequent broadcasts. In the aftermath of 9/11, many resorted to more traditional media, such as newspapers, "people really wanted to look at images in their own time, contemplating and absorbing the tragedy in ways that the rush of television could not accommodate." (Zelizer 2010:115)

In the search for meaning, many audience members turned to film as a reference point. The unfolding events of 9/11 as presented on television appeared to imitate Hollywood movies. The phrase, 'it looks just like a movie' was one that recurred amongst audiences and reporters alike. For those who habitually experience a two dimensional fictional representation of urban destruction in Hollywood films from the *Towering Inferno* to *Die Hard*, then the cultural referent point – or linguistic turn of phrase – was hardly surprising. The director

of *Die Hard*, Steve de Souza commented that the terrorist attacks looked 'like one of my movie posters.'(In Rickli 2009) Whilst the commonplace assertion of 'just like a movie' floated through the ether largely unnoticed, subsequent comments by artist Damien Hurst struck a negative normative reception. Damien Hirst told BBC News Online: "The thing about 9/11 is that it's kind of an artwork in its own right. It was wicked, but it was devised in this way for this kind of impact. It was devised visually…. (It was) visually stunning… You've got to hand it to them on some level because they've achieved something which nobody would have ever have thought possible, especially to a country as big as America…So on one level they kind of need congratulating, which a lot of people shy away from, which is a very dangerous thing." (From the Guardian 11th Sept 2002). Claims of experiencing 9/11 as a form of visual pornography surfaced in the distancing, and subsequent repeated viewing of the disaster. This was juxtaposed to the auditory nature of reception. This auditory record consisted in the many messages sent from the Twin Towers by those who perished there. The New York Port Authority released these tapes to the public in 2004. One of these tapes was the 911 calls between a telephone operator and Kevin Cosgrove who can be heard speaking until the South Tower collapses around him. It is a distressing tape to listen to. However, the wife of Kevin Cosgrove made this observation of her husband's taped conversation:

> "Some people have said you know hearing Kevin's words has made the events of 9/11 more human for them that there were really people in there that it wasn't just a building. One lady called him 'the voice from the towers' it made it real for her - it wasn't just a news story - it seemed like it was just a movie but when they heard Kevin speaking realized it was a real think - there were real people inside." (9/11 Phone Calls from the Towers. Channel 4 Documentary 2009)

Subsequent to the events of 9/11 many disputed the visual evidence displayed before them, arguing that the American administration, and not the terrorist aircraft were responsible for the collapse of both Twin Towers. This resembled earlier claims that images of Lance Armstrong landing on the moon had been fabricated. The world of mediated appearance was deemed to be unreliable.1n 1998 the Hollywood movie The *Truman Show* portrayed the central character played by Jim Carrie as living his whole life unwittingly in a constructed reality

television show watched by millions worldwide. Subsequent to watching the film many viewers developed what was termed as "Truman Show Delusions' – embodying a set of paranoid fantasies that they were indeed being filmed all the time and that the world that they lived in was not real. A comfort denied to those living in Afghanistan under the continual gaze of Drone fighters.

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